VERMONT AGENCY OF NATURAL RESOURCES DEPARTMENT OF ENVIRONMENTAL CONSERVATION

INDIVIDUAL WETLAND PERMIT

In the matter of:

Champlain VT, LLC d/b/a TDI New England c/o Donald Jessome P.O. Box 155 Charlotte, VT 05445

Application for the construction and installation of a high voltage direct current (HVDC) electric transmission line through Grand Isle, Chittenden, Addison, Rutland, and Windsor counties with proposed impacts to 126,353 square feet of wetland and 480,133 square feet of buffer zone.

Located along right-of-ways in portions of the following 13 towns in Rutland and Windsor Counties: Benson, West Haven, Fair Haven, Castleton, Ira, West Rutland, Rutland, Clarendon, Shrewsbury, Wallingford, Mount Holly, Ludlow, and Cavendish

File #: 2013-280 Date of Decision: November 23, 2015 DEC ID #: WY15-0001

Decision: Approved

Expiration Date: November 23, 2020

Any activity in a Class I or Class II wetland or its associated buffer zone is prohibited unless it is an allowed use under the Vermont Wetland Rules (VWR) or unless it receives a permit allowing such activity. 10 V.S.A. § 913. Applicants for an individual permit for a proposed activity in any Class I or Class II wetland or its buffer zone must demonstrate that the proposed activity complies with the VWR and will have no undue adverse effects on protected functions and values. VWR § 9.5(a).

The Vermont Agency of Natural Resources (Agency) received an application dated August 4, 2015 from Champlain VT, LLC d/b/a TDI New England (permittee) seeking an individual Vermont Wetland Permit for a project involving activities in wetlands and associated buffer zones located in Benson, West Haven, Fair Haven, Castleton, Ira, West Rutland, Rutland, Clarendon, Shrewsbury, Wallingford, Mount Holly, Ludlow, and Cavendish, Vermont. The Agency gave notice of the application in accordance with the VWR. The Agency considered all comments received during the public comment period during review of the application and issuance of this permit.

DECISION AND PERMIT CONDITIONS

1. Based on the Findings contained in this permit below, the Secretary has determined that the proposed project will comply with 10 V.S.A. chapter 37 and the VWR and will have no undue adverse effect on protected functions and values of the wetland. The permittee has demonstrated that the project will have no undue adverse effects on the protected functions and values of the significant wetlands and associated buffer zones, provided the project is conducted in accordance with the following conditions:

- A. All activities in the wetland and buffer zone shall be completed, operated, and maintained as set forth in the permit application #2013-280 and the supporting materials submitted with the permit application including the impact plans titled *TDI-NE New England Clean Power Link Project Grand Isle, Rutland & Windsor Counties, VT Class II Wetland and Buffer Impact Exhibits Sheets 1-124* last revised July 31, 2015 prepared by A. Coplin. No material or substantial changes shall be made to the project without the prior written approval of the Vermont Wetlands Program. Project changes may require a permit amendment and additional public notice.
- B. The permittee shall record this permit name, number, and Vermont Wetlands Program contact information in the land records of the Town of Benson, West Haven, Fair Haven, Castleton, Ira, West Rutland, Rutland, Clarendon Shrewsbury, Wallingford, Mount Holly, Ludlow, and Cavendish for all properties subject to the permit. Within 30 days of the date of issuance of this permit, the permittee shall supply the Vermont Wetlands Program with a copy of the recording of this permit.
- C. Prior to commencement of the approved project, the permittee shall notify the Vermont Wetlands Program digitally in writing of the date the project will commence.
- D. **Prohibitions:** No additional activities are allowed in the wetlands and associated buffer zones without the approval of the Secretary unless such activities are allowed uses under VWR § 6. No draining, dredging, filling, grading, or alterations of the water flow is allowed. No cutting, clearing, or removal of vegetation within the wetlands and buffer zones is allowed with the exception of the proposed project area as approved by this permit.
- E. This permit expires five years from the date of issuance. If the permittee has not completed all construction activities covered by this permit before the expiration date and wishes to continue construction, the permittee must request a permit extension or apply for a new permit. Any request for an extension must be received by the Agency at least 30 days prior to the end of the five year period in order to prevent the expiration of the permit. A request for extension may be considered a minor modification at the discretion of the Secretary. Pursuant to VWR § 9.1, projects may not be extended beyond ten years of the issuance date.
- F. Wetland boundary delineations are valid for five years. The delineations will need to be re-evaluated by a qualified wetland consultant if the project is not constructed during the five-year period and a request for an extension is submitted.
- G. Within 30 days of completion of the work approved by this permit, the permittee shall supply the Vermont Wetlands Program with a letter certifying that the project was constructed in compliance with the conditions of this permit.

- H. A continuous line of orange snow fence or flagging tape shall be installed along the limits of disturbance prior to the start of construction when within 200 feet of a wetland or buffer zone.
- I. The erosion prevention and control requirements of the Stormwater Construction Permit #7354-INDC shall be followed.
- J. To prevent the spread of non-native invasive plant species (NNIS), the permittee shall comply with the *Vegetation Management Plan* dated July 27, 2015, or any later version approved by the Agency, which includes the following requirements: all contractors and onsite personnel shall be trained regarding conditions within the non-native invasive plant control plan and the locations and general identification of known and targeted invasives; all contractors' equipment shall be cleaned so as to contain no observable soil or vegetation prior to work in wetlands and buffer zones to prevent the spread of invasive species; and onsite topsoil salvaged from an area where pre-existing non-native invasive populations have been documented shall be utilized in the same locations and not transported to other wetland or buffer areas of the site or the topsoil shall be buried under at least 24 inches of weed-free soil.
- K. Annual monitoring and control of NNIS shall be completed by September 1 of each required monitoring year. Monitoring and control methods shall be completed as specified in the *Vegetation Management Plan* dated July 27, 2015, or any later version approved by the Agency. Annual monitoring shall begin the first full growing season following the completion of construction for each impacted wetland or buffer zone. Should annual monitoring show that no new invasive plant populations are present or any existing populations are expanding in any of the impacted wetland areas during the first two years of monitoring, the Agency may release the permittee from further monitoring obligations.
- L. The permittee shall make an effort to gain access to lands and control invasive populations which are found within the vicinity of the impacted areas.
- M. The permittee shall prepare a monitoring and control report and shall submit the report in digital form to the VT ANR Natural Heritage Inventory Program and the Vermont Wetlands Program no later than January 31 directly following each monitoring year. The monitoring and control report shall include: project background, monitoring methods, monitoring and control results, recommendations for future monitoring, threats and controls, a summary table of NNIS occurrences, NNIS occurrence mapping, and photographic documentation.
- N. Rare, threatened, and endangered plant populations found within wetland or buffer shall be protected in accordance with the *Vegetation Management Plan* dated July 27, 2015 or any later version approved by the Agency.
- O. The permittee shall retain an environmental compliance monitor to be on site during all site preparation and construction related activities taking place in a Class II wetland or buffer zone to assure compliance with the conditions of this permit. An onsite preconstruction meeting shall be scheduled with the Agency Wetlands Program prior to project commencement.

- P. A preconstruction meeting will be scheduled with the environmental compliance monitor and Agency Wetlands Program prior to project commencement. The permittee shall contact the Agency at least two weeks in advance of the proposed preconstruction meeting date in order to schedule the preconstruction meeting. The monitor shall immediately notify the Agency of any non-permitted disturbance to the wetland or buffer zone, including any directional drill inadvertent returns. A site inspection with the Agency Wetlands Program shall be scheduled within 20 days of the completion of construction and installation.
- 2. The Secretary maintains continuing jurisdiction over this project and may at any time order that remedial measures be taken if it appears that undue adverse impacts to the protected functions and values of the wetland or buffer are occurring or will occur.
- 3. This permit does not relieve the permittee of the responsibility to comply with any other applicable federal, state, and local laws, regulations, and permits.
- 4. The permittee shall allow the Secretary or the Secretary's representatives, at reasonable times and upon presentation of credentials, to enter upon and inspect the permitted property for the purpose of ascertaining compliance with this permit, the VWR, and the Vermont Water Quality Standards, and to have access to and copy all records required to be prepared pursuant to this permit.
- 5. The Agency accepts no legal responsibility for any damage direct or indirect of whatever nature and by whomever suffered arising out of the approved project. This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to public or private property, or any invasion of personal rights, or any infringement of federal, state, or local laws or regulations. Nothing in this permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under other laws.
- 6. Within 15 days of the date of the decision, the permittee, any person entitled to notice under VWR § 9.2, or any person who filed written comments regarding the permit application may request in writing reconsideration of the decision by the Secretary in accordance with VWR § 9.6.
- 7. Any person with an interest in this matter may appeal this decision pursuant to 10 V.S.A. § 917. Pursuant to 10 V.S.A. Chapter 220, any appeal of this decision must be filed with the clerk of the Environmental Division of the Superior Court within 30 days of the date of the decision. The Notice of Appeal must specify the parties taking the appeal and the statutory provision under which each party claims party status; must designate the act or decision appealed from; must name the Environmental Division; and must be signed by the appellant or the appellant's attorney. In addition, the appeal must give the address or location and description of the property, project, or facility with which the appeal is concerned and the name of the applicant or any permit involved in the appeal. The appellant must also serve a copy of the Notice of Appeal in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings. For further information, see the Vermont Rules for Environmental Court Proceedings, available on line at www.vermontjudiciary.org. The

address for the Environmental Division is: 32 Cherry St.; 2nd Floor, Suite 303; Burlington, VT 05401 (Tel. # 802-828-1660).

FINDINGS

- 1. The Agency received a complete application from Champlain VT, LLC d/b/a TDI New England for Vermont Wetland Permit # 2013-280 on August 4, 2015.
- 2. The wetlands and adjacent 50-foot buffer zones are located along Stony Point Road and Benson Town Road in Benson, Route 22A and Route 4 in Fair Haven, Route 7 in Rutland, Route 7 and Route 103 in Clarendon, Route 103 and Green Mountain Railroad Corp Railroad in Shrewsbury and Wallingford, Route 103 and Route 100 and town roads in Ludlow, and Cavendish town roads. See attachment 2 from the application for more details.
- 3. Laura Lapierre, Wetlands Program Manager, conducted a site visit to the subject properties with various representatives from the Agency of Natural Resources, Clean Power Link Consultants, and the US Army Corps of Engineers on July 11 2014, August 27, 2014, and May 28, 2015.
- 4. The impacted wetlands are Class II because they are either identified as palustrine wetlands on the Vermont Significant Wetlands Inventory Maps and therefore designated as Class II wetlands under VWR § 4.6 or they meet the presumptions listed in VWR § 4.6, and the Secretary has determined based on an evaluation of the functions and values of the subject wetlands that they are significant wetlands and therefore designated as Class II wetlands. Refer to attachment 5 of the application for individual wetland classifications.
- 5. The wetlands in question are described in detail in Sections 7 and 8 of the permit application. A summary of all impacted Class II wetlands is presented below in Table 1 of this permit.

Wetland ID ¹	Cowardin Classification of Wetland Complex ²	Size of Wetland Complex (Acres)	Size of Delineated Area: Subject Wetland (Acres)	Subject Wetland Landuse	Subject Wetland Vegetation	Subject Wetland Soils ³	Subject Wetland Hydrology ³	
V-BE-W-14	PSS/PFO	5.08	0.03	Naturally vegetated; forested	Forested and Scrub-shrub: Viburnum dentatum; Ilex verticiillata; Acer rubrum	Linwood muck; Depleted Matrix (F3)	Water-Stained Leaves (B9); Saturation (A3); Inundation Visible on Aerial (B7)	
V-BE-W-100	PEM	5.17	0.02	Naturally vegetated; mowing for agricultural purposes	Emergent: Typha latifolia; Acorus calamus	Kingsbury silty clay loam, 0 to 3 percent slopes; Depleted Matrix (F3)	Saturation (A3); Water-stained Leaves (B9); Drainage Patters (B10)	
V-WH-W-5	PEM	2.54	0.03	Naturally vegetated; mowed for agricultural use	Emergent: Phalaris arundinacea; Typha latifolia	Kingsbury silty clay loam, 0 to 3 percent slopes; Depleted Below Dark Surface (A11)	Surface Water (A1); Saturation (A3)	
V-WH-W-6	PEM	11.70	0.00	Mowed for agricultural use	Emergent: Phalaris arundinacea; Typha latifolia	Kingsbury silty clay loam, 3 to 8 percent slopes; Depleted Below Dark Surface (A11)	Surface Water (A1); Saturation (A3)	
V-WH-W-8	PEM	15.33	0.15	Mowed for agricultural use	Emergent: Typha latifolia; Spiraea alba	Livingston silty clay loam; Depleted Matrix (F3)	Surface Water (A1); Saturation (A3); Drainage Patterns (B10)	
V-WH-W-9	PEM	1.53	0.11	Mowed for agricultural use	Emergent: Phalaris arundinacea; Typha latifolia	Kingsbury silty clay loam, 0 to 3 percent slopes; Depleted Matrix (F3)	Surface Water (A1); Saturation (A3); Drainage Patterns (B10)	
V-WH-W-10	PEM	17.33	0.04	Mowed for agricultural use and mowed parking area	Emergent: Phalaris arundinacea; Typha latifolia	Kingsbury silty clay loam, 0 to 3 percent slopes; Depleted Matrix (F3)	Saturation (A3); Drainage Patterns (B10)	
V-WH-W-11	PEM	17.33	0.03	Mowed agricultural use and road ROW	Emergent: Phalaris arundinacea; Typha latifolia	Farmington-Galway-Galoo complex, 25 to 50 percent slopes, very rocky; Depleted Matrix (F3)	Surface Water (A1); High Water Table (A2); Saturation (A3); Drainage Patterns (B10)	
V-WH-W-4	PEM	1.36	0.02	Naturally vegetated; mowed road ROW	Emergent: Phalaris arundinacea; Typha latifolia	Kingsbury silty clay loam, 0 to 3 percent slopes; Depleted Matrix (F3) and Histosol (A1)	Saturation (A3)	
V-FH-W-21	PEM/PSS	6.97	0.20	Naturally vegetated mowed road ROW; mowed fields	Emergent and Scrub-shrub: Phalaris arundinacea; Typha latifolia; Salix bebbiana	Kingsbury silty clay loam, 3 to 8 percent slopes; Depleted Matrix (F3)	Surface Water (A1); High Water Table (A2); Saturation (A3); Drainage Patterns (B10)	
V-FH-W-20	PEM/PSS	23.93	0.25	Naturally vegetated; agricultural field	Emergent and Scrub-shrub: Phalaris arundinacea; Typha latifolia	Vergennes clay, 15 to 25 percent slopes; Redox Dark Surface (F6) and Histosol (A1)	High Water Table (A2); Saturation (A3); Drainage Patterns (B10)	
V-FH-W-19	PEM	23.93	0.21	Naturally vegetated; agricultural field	Emergent: <i>Phalaris arundinacea; Typha latifolia</i> Vergennes clay, 8 to 15 percent slopes; Redox Dark Surface (F6) and Histosol (A1)		High Water Table (A2); Saturation (A3); Drainage Patterns (B10)	
V-FH-AW-18	PEM/PFO	0.06	0.05	Naturally vegetated; road ROW	Emergent and Forested: <i>Phalaris</i> arundinacea; Onoclea sensibilis Kingsbury silty clay loam, 0 to 3 percent slopes; Depleted Matrix (F3)		Saturation (A3); Drainage Patterns (B10)	

Wetland ID ¹	Cowardin Classification of Wetland Complex ²	Size of Wetland Complex (Acres)	Size of Delineated Area: Subject Wetland (Acres)	Subject Wetland Landuse	Subject Wetland Vegetation			
V-FH-W-15	PEM/PSS	231.43	0.25	Naturally vegetated; road ROW	Emergent and Scrub-shrub: <i>Phalaris</i> arundinacea; Onoclea sensibilis; Spiraea alba Limerick silt loam; Histosol (A1)		Saturation (A3); Drainage Patterns (B10)	
V-FH-W-4	PEM / PFO / PSS	231.43	1.96	Naturally vegetated; road ROW	Emergent, Scrub-shrub and Forested: Typha latifolia; Onoclea sensibilis; Alnus incana; Acer rubrum	Kingsbury silty clay loam, 0 to 3 percent slopes; Depleted Matrix (F3)	Surface Water (A1); Saturation (A3); Water-stained Leaves (B9); Drainage Patterns (B10)	
V-FH-W-6	PEM	231.43	0.12	Maintained vegetation; road ROW	Emergent: Phalaris arundinacea; Carex aquatilis	Kingsbury silty clay loam, 0 to 3 percent slopes; Redox Dark Surface (F6)	Saturation (A3)	
V-FH-W-3	PEM / PSS	0.05	0.05	Naturally vegetated; road ROW	Emergent and Scrub-shrub: Onoclea sensibilis; Cornus sericea	Windsor loamy sand, 15 to 25 percent slopes; Histosol (A1)	Surface Water (A1); Saturation (A3); Water-stained Leaves (B9)	
V-FH-W-5	PEM	0.17	0.14	Naturally vegetated; road ROW	Emergent: Phalaris arundinacea; Onoclea sensibilis	Deerfield loamy sand, 0 to 4 percent slopes; Depleted Below Dark Surface (A11)	Surface Water (A1); Saturation (A3); Water-stained Leaves (B9)	
V-FH-W-9	PEM / PSS	29.10	0.96	Maintained vegetation along road ROW; naturally vegetated	Emergent and Scrub-shrub: Phalaris arundinacea; Onoclea sensibilis; Vaccinium corymbosum	Belgrade silt loam, 3 to 8 percent slopes; Histosol (A1)	Saturation (A3); Water-stained Leaves (B9)	
V-CN-W-106	PEM / PSS / PFO	0.46	0.12	Maintained vegetation along road ROW; naturally vegetated	Emergent, Scrub-shrub and Forested: Onoclea sensibilis; Ilex verticillata; Acer rubrum	Deerfield loamy sand, 0 to 4 percent slopes; Histosol (A1)	Surface Water (A1); Saturation (A3); Water-stained Leaves (B9); Drainage Patterns (B10)	
V-CN-W-102	PEM	84.64	0.24	Maintained vegetation along road ROW; naturally vegetated	Emergent: Onoclea sensibilis; Symplocarpus foetidus; Fraxinus pennsylvanica	Limerick silt loam; Depleted Matrix (F3)	Saturation (A3); Drainage Patterns (B10); Hydrogen sulfide odor (C1)	
V-CN-W-103	PEM / PSS	84.64	0.60	Maintained vegetation along road ROW; naturally vegetated	Emergent and Scrub-shrub: Onoclea sensibilis; Typha latifolia; Ilex verticillata	Limerick silt loam; Histosol (A1)	Surface Water (A1); Saturation (A3); Water-stained Leaves (B9)	
V-CN-W-104	PFO / PEM / PSS	84.64	2.73	Maintained road ROW; naturally vegetated	Emergent, Scrub-shrub and Forested: Onoclea sensibilis; Symplocarpus foetidus; Acer rubrum	Walpole fine sandy loam, 0 to 5 percent slopes; Depleted Matrix (F3)	Surface Water (A1); Saturation (A3); Water-stained Leaves (B9)	
V-CN-W-113	PEM / PSS / PFO	8.65	0.69	Maintained road ROW; naturally vegetated	Emergent, Scrub-shrub and Forested: Onoclea sensibilis; Caltha palustris; Ilex verticillata; Ulmus americana	Deerfield loamy sand, 0 to 4 percent slopes; Histosol (A1)	Saturation (A3)	

Wetland ID ¹	Cowardin Classification of Wetland Complex ²	Size of Wetland Complex (Acres)	Size of Delineated Area: Subject Wetland (Acres)	Subject Wetland Landuse	Subject Wetland Vegetation	Subject Wetland Soils ³	Subject Wetland Hydrology ³	
V-CN-W-115	PEM	10.11	0.40	Maintained road ROW; naturally vegetated	Emergent: Phalaris arundinacea; Taconic-Macomber complex, 8 to 25 Onoclea sensibilis; Typha latifolia percent slopes, very rocky; Histosol (A1)		Surface Water (A1); Saturation (A3)	
V-CN-W-116	PEM, PSS, PFO	66.12	0.04	Maintained road ROW; naturally vegetated	Emergent, Scrub-shrub and forested: Phragmites australis; Symplocarpus foetidus	Taconic-Macomber complex, 8 to 25 percent slopes, very rocky; Histosol (A1)	Surface Water (A1); Saturation (A3)	
V-CN-W-10	PEM/PSS	66.12	0.15	Maintained road ROW; naturally vegetated	Emergent and Scrub-shrub: Typha latifolia; Onoclea sensibilis; Alnus incana	Pinnebog muck; Histosol (A1)	High Water Table (A2); Saturation (A3); Water-stained Leaves (B9)	
V-CN-W-11	PEM/PSS/PFO	0.56	0.14	Maintained road ROW; naturally vegetated	Emergent and Scrub-shrub and Forested: Impatiens capensis; Onoclea sensibilis; Acer rubrum	Taconic-Hubbardton complex, 8 to 25 percent slopes, very rocky; Histic Epipedon (A2)	Saturation (A3); Water-stained Leaves (B9)	
V-CN-W-12	PEM/PSS	0.56	0.28	Maintained road ROW; naturally vegetated; agricultural field	Emergent and Scrub-shrub: Impatiens capensis; Typha latifolia; Cornus amomum	Raynham silt loam, 0 to 4 percent slopes; Depleted Dark Surface (F7)	High Water Table (A2); Saturation (A3)	
V-CN-W-15	PEM/PSS	0.56	0.49	Maintained road ROW; naturally vegetated	Emergent and Scrub-shrub: Onoclea sensibilis; Illex verticillata; Typha latifolia	Belgrade silt loam, 3 to 8 percent slopes; Depleted Matrix (F3)	Saturation (A3); Drainage Patterns (B10)	
V-CN-W-16	PEM	152.10	0.03	Maintained road ROW; naturally vegetated	Emergent: Phalaris arundinacea; Onoclea sensibilis; Spiraea alba	Udorthents loamy; Depleted Dark Surface (F7)	Surface Water (A1); High Water Table (A2); Saturation (A3)	
V-CN-W-17	PEM/PSS	152.10	1.01	Maintained road ROW; naturally vegetated	Emergent and Scrub-shrub: Phalaris arundinacea; Onoclea sensibilis; Alnus incana	Tioga fine sandy loam; Depleted Dark Surface (F7)	Surface Water (A1); High Water Table (A2); Saturation (A3)	
V-CN-W-18	PEM/PFO	152.10	0.38	Maintained road ROW; naturally vegetated	Emergent and Forested: Onoclea sensibilis; Typha latifolia; Cornus amomum	Udorthents loamy; Histic Epipedon (A2)	Surface Water (A1); High Water Table (A2); Saturation (A3); Drainage Patterns (B10)	
V-CN-W-3/6	PEM/PSS	0.36	0.23	Maintained road ROW; naturally vegetated	Emergent and Scrub-shrub: Phalaris arundinacea; Onoclea sensibilis; Salix bebbiana	Udorthents loamy; Depleted Dark Surface (F7)	High Water Table (A2); Saturation (A3); Drainage Patterns (B10)	
T-WR-AW-12	PFO	0.06	0.06	Located on the perimeter of a large naturally forested area; bisected by a stream	Forested: Species composition not verified in field	Warwick-Quonset complex, 15 to 25 percent slopes; Hydric Indicator not verified in field	Hydrologic Indicator not verified in field	
T-RU-W4	PEM/PSS	75.66	5.14	Amidst patchwork agricultural areas and naturally	Emergent and Scrub-shrub: Typha latifolia, Cornus sericea	Belgrade silt loam, 0 to 3 percent slopes; Histic Epipedon (A2)	Water-Stained Leaves (B9); Saturation (A3)	

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				vegetated wetlands; floodplain to the west			
T-CL-W7	PFO/PEM	0.92	0.25	Mowed and naturally forested; roadside slopes	Forested and Emergent: Acer rubrum, Typha latifolia	Massena silt loam, 0 to 8 percent slopes, very stony; Histic Epipedon (A2)	Water-Stained Leaves (B9); Saturation (A3)
T-CL-W6	PFO	0.10	0.02	Naturally forested; edge of maintained road shoulder	Forested: Pinus strobus, Salix nigra, Onoclea sensibilis	Georgia and Amenia soils, 3 to 8 percent slopes; Depleted Matrix (F3)	Water-Stained Leaves (B9); Drainage Patterns (B10); Geomorphic Position (D2)
T-CL-W1	PEM	0.06	0.06	Maintained roadsides/transmiss ion ROW; some areas naturally vegetated	Emergent: <i>Phleum pratense</i>	Emergent: <i>Phleum pratense</i> Georgia and Amenia soils, 3 to 8 percent slopes; Depleted Matrix (F3)	
T-CL-W15	PEM	0.30	0.01	Naturally vegetated; toe of roadside slope	Emergent: <i>Typha latifolia</i>	Massena silt loam, 0 to 8 percent slopes, very stony; Histic Epipedon (A2)	Water-Stained Leaves (B9); Drainage Patterns (B10); Geomorphic Position (D2); Saturation (A3)
T-CL-AW-15	PEM	0.30	0.20	Naturally vegetated; toe of roadside slope	Emergent: <i>Typha latifolia</i>	Massena silt loam, 0 to 8 percent slopes, very stony; Histic Epipedon (A2)	Water-Stained Leaves (B9), Drainage Patterns (B10), Geomorphic Position (D2); Saturation (A3)
T-CL-AW-25	PEM	0.30	0.08	Naturally vegetated; toe of roadside slope	Emergent: Species composition not verified in field	Paxton fine sandy loam, 8 to 15 percent slopes; Hydric Indicator not verified in field	Hydrologic Indicator not verified in field
T-CL-AW-24	PEM	1.80	0.20	Naturally vegetated; edge of wetland complex	Emergent: Species composition not verified in field	Paxton fine sandy loam, 8 to 15 percent slopes; Hydric Indicator not verified in field	Hydrologic Indicator not verified in field
T-CL-W17	PEM	165.82	0.04	Naturally vegetated; bordering road shoulder	Emergent: Typha latifolia; off-ROW forested species not verified Adrian muck; Depleted Matrix (F3)		Water-Stained Leaves (B9); Drainage Patterns (B10); Geomorphic Position (D2); Saturation (A3)
T-CL-AW-18	PFO	165.82	0.45	Naturally vegetated; at perimeter of wetland complex; stream to the east	Forested: Acer rubrum, Spiraea alba, Osmunda cinnamomea	Adrian muck; Depleted Matrix (F3)	Water-Stained Leaves (B9); Saturation (A3)

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T-CL-W18	PFO	165.82	0.02	Naturally vegetated; at perimeter of wetland complex; stream to the east	Forested: Acer rubrum, Spiraea alba, Osmunda cinnamomea Deerfield loamy sand, 0 to 4 percent slopes; Depleted Matrix (F3)		Water-Stained Leaves (B9); Saturation (A3)
T-CL-W20	PFO	0.19	0.06	Naturally forested	Forested: Fraxinus pennsylvanica, Lonicera morrowii, Onoclea sensibilis	Hinckley gravelly loamy fine sand, 0 to 8 percent slopes; Depleted Matrix (F3)	Water-Stained Leaves (B9); Saturation (A3)
T-CL-W22	PEM	25.99	0.78	Naturally vegetated; areas of mowed road shoulder	Emergent: <i>Typha latifolia</i>	Sudbury fine sandy loam, 3 to 8 percent slopes; Histosol (A1)	Saturation (A3)
V-SH-W-7	PEM/PSS	0.25	0.04	Maintained road ROW; naturally vegetated	Emergent and Scrub-shrub: Onoclea sensibilis; Impatiens capensis; Spiraea alba	Impatiens capensis; Spiraea Hartiand silt loam, 3 to 8 percent slopes; Histic Eninedon (A2)	
V-SH-W-201	PFO	0.29	0.12	Maintained railroad ROW; naturally vegetated	Forested: Acer rubrum; Populous deltoides	Peacham muck, 0 to 8 percent slopes; Depleted Below Dark Surface (A11)	Surface Water (A1); High Water Table (A2); Drainage Patterns (B10); Geomorphic Position (D2)
T-SH-AW8	PSS	0.10	0.10	Naturally vegetated; riparian areas; mowed lawn	Scrub-shrub: Species composition not verified in field	Paxton fine sandy loam, 8 to 15 percent slopes; Hydric Indicator not verified in field	Hydrologic Indicator not verified in field
T-SH-W9	PFO	0.70	0.21	Naturally forested; riparian areas	Forested: Fraxinus americana, Alnus incana, Onoclea sensibilis	Linwood muck; Thick Dark Surface (A12)	Saturation (A3); Water-Stained Leaves (B9)
T-SH-W10	PFO	0.28	0.09	Naturally forested hillside seep; riparian areas	Forested: Fraxinus americana, Acer rubrum, Onoclea sensibilis	Linwood muck; Depleted Matrix (F3)	Saturation (A3)
T-SH-W13	PSS	2.34	0.27	Naturally vegetated	Scrub-shrub: Acer rubrum, Typha latifolia	Cabot gravelly fine sandy loam, 0 to 8 percent slopes, very stony; Redox Dark Surface (F6)	Saturation (A3); High Water Table (A2)
T-WA-W3	PFO	2.34	0.15	Naturally vegetated	Forested, Scrub-shrub, Emergent: Acer rubrum; Onoclea sensibilis	Brayton loam, 8 to 15 percent slopes, very stony; Redox Dark Surface (F6)	Saturation (A3)
T-WA-W4	PFO	0.57	0.20	Naturally forested; intermittent and ephemeral drainages present	Forested: Acer rubrum, Fraxinus americana, Onoclea sensibilis	Peru gravelly fine sandy loam, 15 to 25 percent slopes, very stony; Thick Dark Surface (A12)	Saturation (A3)
T-WA-W9	PEM	0.03	0.03	Naturally vegetated; stream present	Emergent: Fraxinus americana, Carex crinita	Sunapee fine sandy loam, 35 to 50 percent slopes, very stony; Thick Dark Surface (A12)	Saturation (A3)

Wetland ID ¹	Cowardin Classification of Wetland Complex ²	Size of Wetland Complex (Acres)	Size of Delineated Area: Subject Wetland (Acres)	Subject Wetland Landuse	Subject Wetland Vegetation	Subject Wetland Soils ³	Subject Wetland Hydrology ³
T-WA-W10	PEM	0.03	0.02	Naturally vegetated hillside seep	Emergent: Fraxinus americana, Onoclea sensibilis	Sunapee fine sandy loam, 35 to 50 percent slopes, very stony; Thick Dark Surface (A12)	Saturation (A3)
V-WA-AW-106	PSS	0.16	0.16	Maintained road ROW; naturally vegetated	road Scrub-shrub: Salix discolor; Onoclea rally sensibilis: Impatiens capensis Scrub-shrub: Salix discolor; Onoclea Depleted Matrix (F3) and Redox Dark		Saturation (A3); Sediment Deposits (B2); Iron Deposits (B5); Water- stained Leaves (B9); Drainage Patterns (B10)
V-WA-W-105	PSS/ PFO	0.20	0.00	Maintained road ROW; naturally vegetated	Scrub-shrub and Forested: Onoclea sensibilis; Impatiens capensis; Salix discolor; Acer rubrum Sheepscot fine sandy loam, 2 to 8 percent slopes; Depleted Matrix (F3) and Redox Dark Surface (F6)		Saturation (A3); Sediment Deposits (B2); Iron Deposits (B5); Water- stained Leaves (B9); Drainage Patterns (B10)
V-WA-AW-104	PSS	0.35	0.04	Naturally vegetated; maintained vegetation along road	Scrub-shrub: Acer rubrum, Alnus incana, Onoclea sensibilis		
V-WA-W-102	PEM/ PSS	0.35	0.00	Naturally vegetated; maintained vegetation along road	Emergent and Scrub-shrub: Onoclea sensibilis; Impatiens capensis; Caltha palustris	Sheepscot fine sandy loam, 2 to 8 percent slopes; Depleted Matrix (F3)	Saturation (A3); Sediment Deposits (B2); Iron deposits (B5); Water- stained leaves (B9)
V-WA-AW-102	PEM/ PSS	0.35	0.08	Naturally vegetated; maintained vegetation along road	Emergent: Onoclea sensibilis; Impatiens capensis; Caltha palustris	Sheepscot fine sandy loam, 2 to 8 percent slopes; Depleted Matrix (F3)	Saturation (A3); Sediment Deposits (B2); Iron deposits (B5); Water- stained leaves (B9)
V-WA-W-101	PEM/ PFO	0.87	0.05	Maintained road ROW; naturally vegetated	Emergent and Forested: Phalaris arundinacea; Spiraea tomentosa	Sheepscot fine sandy loam, 2 to 8 percent slopes; Depleted Matrix (F3)	Saturation (A3); Water-stained Leaves (B9); Drainage Patterns (B10)
T-MH-W55	PSS	0.52	0.01	Maintained road shoulder and naturally vegetated areas; streams present	Scrub-shrub: Spiraea latifolia, Typha latifolia Hartland silt loam, 15 to 25 percent slopes; Depleted Below Dark Surface (A11)		Saturation (A3); High Water Table (A2); Saturation Visible on Aerial Imagery (C9)
T-MH-AW-55	PEM/PFO	0.52	0.51	Maintained road shoulder and naturally vegetated areas; streams present	Forested and Emergent: Species composition not verified in field	nercent slones. Denleted Relow Dark	

Wetland ID ¹	Cowardin Classification of Wetland Complex ²	Size of Wetland Complex (Acres)	Size of Delineated Area: Subject Wetland (Acres)	Subject Wetland Landuse	Subject Wetland Vegetation	Subject Wetland Soils ³	Subject Wetland Hydrology ³
T-MH-W56	PEM	0.15	0.01	Maintained road shoulder; lawn; jurisdictional ditch	Emergent: Onoclea sensibilis	Peru gravelly fine sandy loam, 8 to 15 percent slopes, very stony; Depleted Below Dark Surface (A11)	Saturation (A3); Drainage Patterns (B10)
T-MH-W53 NORTH	PFO	13.61	0.01	Naturally vegetated	Forested: Populus balsamifera	Peru gravelly fine sandy loam, 8 to 15 percent slopes, very stony; Depleted Below Dark Surface (A11)	Saturated (A3); Water-Stained Leaves (B9)
T-MH-W50	PEM/PSS	0.6	0.12	Maintained road shoulder	Scrub-shrub and Emergent: Salix nigra, Onoclea sensibilis	Peru gravelly fine sandy loam, 8 to 15 percent slopes, very stony; Depleted Below Dark Surface (A11)	Saturation (A3); Water-Stained Leaves (B9); Drainage Patterns (B10)
T-MH-AW-73	PEM	1.18	0.04	Wet hayfield and lawn	Emergent: Species composition not verified in field	Lyme fine sandy loam, 2 to 8 percent slopes, very stony; Hydric Indicator not verified in field	Hydrologic Indicator not verified in field
T-MH-W45	PSS/PEM	0.51	0.19	Naturally vegetated; areas of mowed road shoulder	Scrub-shrub and Emergent: Spiraea latifolia, Onoclea sensibilis	Lyme fine sandy loam, 8 to 15 percent slopes, very stony; Depleted Below Dark Surface (A11)	Water-Stained Leaves (B9); Drainage Patterns (B10); Saturation (A3)
T-MH-W41	PEM	0.44	0.06	Maintained road shoulder	Emergent: Abies balsamea; Spiraea latifolia; Typha latifolia	Lyme fine sandy loam, 2 to 8 percent slopes, very stony; Histic Epipedon (A2)	Water-Stained Leaves (B9); Saturation (A3)
T-MH-W38	PSS/PFO	0.50	0.02	Mowed road shoulder; roadside swale	Forested and Scrub-shrub: Fraxinus pennsylvanica, Spiraea latifolia	Peru gravelly fine sandy loam, 8 to 15 percent slopes, very stony; Depleted Below Dark Surface (A11)	Water-Stained Leaves (B9); Saturation (A3)
T-MH-W37	PSS	0.50	0.01	Naturally vegetated; mowed road shoulder	Scrub-shrub: Salix nigra	Peru gravelly fine sandy loam, 8 to 15 percent slopes, very stony; Depleted Below Dark Surface (A11)	Drainage Patterns (B10); Water- Stained Leaves (B9); Saturation (A3)
T-MH-W33	PSS	0.74	0.02	Naturally vegetated; maintained road shoulder; field	Scrub-shrub: Potentilla fruticosa	Tunbridge-Berkshire complex, 15 to 35 percent slopes, rocky; Thick Dark Surface (A12)	Drainage Patterns (B10); Saturation (A3)
T-MH-W28	PSS	3.93	0.11	Naturally vegetated; areas in mowed road shoulder	Scrub-shrub: Alnus incana, Phalaris arundinacea	Peacham muck, 0 to 8 percent slopes; Depleted Matrix (F3)	High Water Table (A2); Saturation (A3); Drainage Patterns (B10)
T-MH-AW-69	PSS	116.54	0.01	Naturally vegetated	Assumed scrub-shrub: Species composition not verified in field	Peru gravelly fine sandy loam, 8 to 15 percent slopes; Hydric Indicator not verified in field	Hydrologic Indicator not verified in field
T-MH-AW-70	PSS	116.54	0.04	Naturally vegetated	Assumed emergent: Species composition not verified in field	Peru gravelly fine sandy loam, 8 to 15 percent slopes; Hydric Indicator not verified in field	Hydrologic Indicator not verified in field

Wetland ID ¹	Cowardin Classification of Wetland Complex ²	Size of Wetland Complex (Acres)	Size of Delineated Area: Subject Wetland (Acres)	Subject Wetland Landuse	Subject Wetland Vegetation	Subject Wetland Soils ³	Subject Wetland Hydrology ³
T-MH-AW-24- South	PEM	116.54	0.22	Naturally vegetated	Assumed emergent: Species composition not verified in field	Peru gravelly fine sandy loam, 8 to 15 percent slopes; Hydric Indicator not verified in field	Hydrologic Indicator not verified in field
T-MH-W23	PEM/PSS	116.54	0.01	Maintained road shoulder	Scrub-shrub and Emergent: Salix nigra, Impatiens capensis Colton-Duxbury complex, 8 to 15 percent slopes; Redox Dark Surface (F6)		High Water Table (A2); Geomorphic Position (D2); Drainage Patterns (B10); Saturation (A3)
T-MH-AW-23	PEM/PSS	116.54	0.29	Naturally vegetated	Scrub-shrub (south) and Emergent (north): Populus balsamifera, Salix nigra, Impatiens capensis	Marlow fine sandy loam, 3 to 8 percent slopes; Redox Dark Surface (F6)	High Water Table (A2); Geomorphic Position (D2); Drainage Patterns (B10)
T-MH-W20	PEM/PSS	0.23	0.03	Vegetated roadside ditch	Scrub-shrub and Emergent: Spiraea alba, Solidago rugosa	Adams loamy fine sand, 8 to 15 percent slopes; Walpole fine sandy loam, 0 to 5 percent slopes; Redox Dark Surface (F6)	Surface Water (A1); Saturation (A3)
T-MH-AW-66	PFO	0.11	0.11	Naturally vegetated	Forested: Species composition not verified in field	Colton-Duxbury complex, 8 to 15 percent slopes; <i>Hydric Indicator not verified in field</i>	Hydrologic Indicator not verified in field
T-MH-W11	PSS	0.08	0.00	Naturally vegetated	Scrub-shrub: <i>Spiraea alba</i>	Marlow fine sandy loam, 8 to 15 percent slopes; Histosol (A1)	High Water Table (A2); Water- Stained Leaves (B9); Drainage Patterns (B10)
T-MH-W9	PSS	1.35	0.02	Areas of maintained road shoulder/transmissi on line ROW; naturally vegetated; stream present	Scrub-shrub: <i>Spiraea alba</i>	Cabot gravelly fine sandy loam, 0 to 8 percent slopes, very stony; Redox Dark Surface (F6)	High Water Table (A2); Geomorphic Position (D2); Drainage Patterns (B10)
T-MH-AW-9	PSS	1.35	0.38	Areas of maintained road shoulder/ transmission line ROW; naturally vegetated; stream present	Cabot gravelly fine sandy loam, 0 to 8 Scrub-shrub: Spiraea alba percent slopes, very stony; Redox Dark Surface (F6)		High Water Table (A2); Geomorphic Position (D2); Drainage Patterns (B10)
T-LU-W13	PEM	0.51	0.26	Mowed roadsides; naturally vegetated; driveways; riparian area in southeast	Emergent: Phalaris arundinacea, Onoclea sensibilis, Caltha palustris	9	

¹ Wetlands are listed in order from west to east along the project corridor.

² Cowardin Classifications (Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitat of the United States.) PEM - Palustrine emergent wetland; PSS - Palustrine scrub shrub wetland; PFO – Palustrine forested wetland

³ Category and code from the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, 2012.

- 6. The proposed project is described in detail in Sections 10 and 11 of the permit application. The project consists of the construction and installation of a high voltage direct current (HVDC) electric transmission line. The line will run from the Canadian border at Alburgh, VT to a converter station in Ludlow, VT. The line will run for approximately 97 miles within Lake Champlain and will not encounter any wetlands within this "Lake Route" portion of the project. Once the line exits the Lake, the "Overland Route" of the project will run for approximately 57 miles from Benson, VT to Ludlow, VT. The Overland Route is located within existing public (state and town) road and railroad right-of-ways and within three properties controlled by the permittee.
- 7. Proposed impacts to the wetlands and buffer zones, summarized in Section 12 of the permit application, are shown below in this permit as a cumulative impact table across Class II wetlands within the project area (Table 2) and as a detailed individual wetland impact table (Table 3).

Table 2: Summary of Cumulative Impacts across Class II Wetlands within the TDI New England Project Area

Wetland Alterat	tion:	Buffer Zone Alteration:		
Wetland Fill:	0 sq.ft.	/		
Temporary:	100,039 sq.ft.	Temporary:	429,537 sq.ft.	
Other Permanent: :	26,314 sq.ft.	Permanent: :	50,596 sq.ft.	
Total Wetland Impact	126,353 sq.ft.	Total Buffer Zone Impact:	480,133 sq.ft.	

Table 3: Summary of Impacts for Individual Class II Wetlands and/or Class II Wetland 50-ft. Buffer Areas

			Class II Wetland	Impacts ²		Class II W	etland Buffer	Impacts	
Wetland ID ¹	Wetland Fill (Sq. Ft)	Temporary Wetland Impacts (Sq. Ft)	Temporary Wetland Clearing Impacts (Sq. Ft)	Permanent Wetland Clearing Impacts (Sq. Ft)	TOTAL WETLAND IMPACTS (Sq. Ft)	Temporary Buffer Impacts (Sq. Ft)	Permanent Buffer Impact (Sq. Ft)	TOTAL BUFFER IMPACTS (Sq. Ft)	TOTAL IMPACTS of Class II Wetland <u>and</u> 50-ft Buffer
V-BE-W-14	0	405	0	0	405	2,169	323	2,492	2,897
V-BE-W-100	0	90	0	0	90	2,918	0	2,918	3,008
V-WH-W-5	0	1,168	0	0	1,168	2,736	0	2,736	3,904
V-WH-W-6	0	106	0	0	106	1,212	0	1,212	1,318
V-WH-W-8	0	1,898	0	0	1,898	3,536	0	3,536	5,434
V-WH-W-9	0	0	0	0	0 /	3,573	0	3,573	3,573
V-WH-W-10	0	0	0	0	0	3,879	0	3,879	3,879
V-WH-W-11	0	680	0	0	680	14,945	346	15,291	15,971
V-WH-W-4	0	0	0	0	/ 0	3,541	0	3,541	3,541
V-FH-W-21	0	654	1,580	947	3,181	12,826	720	13,546	16,727
V-FH-W-20	0	0	0	0	0	10,884	2,267	13,151	13,151
V-FH-W-19	0	0	0	0/	0	7,969	0	7,969	7,969
V-FH-AW-18	0	0	0	0	0	1,277	0	1,277	1,277
V-FH-W-15	0	0	0	/ 0	0	1,708	0	1,708	1,708
V-FH-W-3	0	0	0	0	0	2,405	137	2,542	2,542
V-FH-W-5	0	0	275	0	275	2,746	1,755	4,501	4,776
V-FH-W-4	0	15	1,579	707	2,301	20,756	2,842	23,598	25,899
V-FH-W-6	0	1,092	138	0	1,230	2,896	362	3,258	4,488
V-FH-W-9	0	0	0	0	0	2,398	397	2,795	2,795
V-CN-W-106	0	0	0	0	0	34	0	34	34
V-CN-W-102	0	0	0	0	0	3,838	275	4,113	4,113
V-CN-W-103	0	27	733	0	760	4,014	0	4,014	4,774
V-CN-W-104	0	0	1,007	0	1,007	7,136	1,017	8,153	9,160

Table 3: Summary of Impacts for Individual Class II Wetlands and/or Class II Wetland 50-ft. Buffer Areas

			Class II Wetland	Impacts ²		Class II W	etland Buffer	Impacts	
Wetland ID ¹	Wetland Fill (Sq. Ft)	Temporary Wetland Impacts (Sq. Ft)	Temporary Wetland Clearing Impacts (Sq. Ft)	Permanent Wetland Clearing Impacts (Sq. Ft)	TOTAL WETLAND IMPACTS (Sq. Ft)	Temporary Buffer Impacts (Sq. Ft)	Permanent Buffer Impact (Sq. Ft)	TOTAL BUFFER IMPACTS (Sq. Ft)	TOTAL IMPACTS of Class II Wetland <u>and</u> 50-ft Buffer
V-CN-W-113	0	155	1,271	28	1,454	3,510	887	4,397	5,851
V-CN-W-115	0	0	0	0	0	3,875	0	3,875	3,875
V-CN-W-116	0	0	0	0	0	185	0	185	185
V-CN-W-10	0	0	0	0	0	278	0	278	278
V-CN-W-11	0	0	192	0	192	5,324	87	5,411	5,603
V-CN-W-12	0	352	424	0	776	1,849	0	1,849	2,625
V-CN-W-15	0	3,136	11,667	397	15,200	24,788	1,351	26,139	41,339
V-CN-W-16	0	0	0	0	0	1,455	320	1,775	1,775
V-CN-W-17	0	0	0	0	0	4,471	338	4,809	4,809
V-CN-W-18	0	0	0	0	0	20,478	0	20,478	20,478
V-CN-W-3/6	0	817	1,428	0	2,245	17,615	0	17,615	19,860
T-WR-AW-12	0	0	0	0	0	25	0	25	25
T-RU-W4	0	737	14,542	3,325	18,604	16,835	4,535	21,370	39,974
T-CL-W7	0	604	896	962	2,462	11,755	648	12,403	14,865
T-CL-W6	0	0	0	0	0	825	0	825	825
T-CL-W1	0	0	0	0	0	3,748	0	3,748	3,748
T-CL-W15	0	0	0	0	0	1,591	0	1,591	1,591
T-CL-AW-15	0	0	0	0	0	38	0	38	38
T-CL-AW-25	0	0	0	0	0	3,528	0	3,528	3,528
T-CL-AW-24	0	0	0	0	0	6,933	0	6,933	6,933
T-CL-W17	0	0	0	0	0	9,058	1	9,059	9,059
T-CL-W18	0	0	210	0	210	8,105	4,053	12,158	12,368
T-CL-AW-18	0	0	0	0	0	253	0	253	253
T-CL-W20	0	0	27	0	27	7,200	486	7,686	7,713
T-CL-W22	0	3,394	7,566	284	11,244	15,129	195	15,324	26,568

Table 3: Summary of Impacts for Individual Class II Wetlands and/or Class II Wetland 50-ft. Buffer Areas

			Class II Wetland	Impacts ²		Class II W	etland Buffer	Impacts	
Wetland ID ¹	Wetland Fill (Sq. Ft)	Temporary Wetland Impacts (Sq. Ft)	Temporary Wetland Clearing Impacts (Sq. Ft)	Permanent Wetland Clearing Impacts (Sq. Ft)	TOTAL WETLAND IMPACTS (Sq. Ft)	Temporary Buffer Impacts (Sq. Ft)	Permanent Buffer Impact (Sq. Ft)	TOTAL BUFFER IMPACTS (Sq. Ft)	TOTAL IMPACTS of Class II Wetland <u>and</u> 50-ft Buffer
V-SH-W-7	0	104	480	1,108	1,692	3,479	1,626	5,105	6,797
V-SH-W-201	0	0	37	0	37	5,173	4,140	9,313	9,350
T-SH-AW8	0	0	0	0	0	1,188	1,421	2,609	2,609
T-SH-W9	0	414	5,117	3,648	9,179	8,633	3,224	11,857	21,036
T-SH-W10	0	0	1,951	2,050	4,001	5,074	1,487	6,561	10,562
T-SH-W13	0	6,406	906	4,292	11,604	1,419	677	2,096	13,700
T-WA-W3	0	0	878	1,097	1,975	738	1,699	2,437	4,412
T-WA-W4	0	0	3,872	4,752	8,624	11,546	2,070	13,616	22,240
T-WA-W9	0	0	863	409	1,272	3,292	768	4,060	5,332
T-WA-W10	0	0	806	247	1,053	3,958	1,009	4,967	6,020
V-WA-AW-106	0	0	0	0	0	2,274	219	2,493	2,493
V-WA-W-105	0	0	0	0	0	23	0	23	23
V-WA-AW-104	0	0	0	0	0	1,490	0	1,490	1,490
V-WA-W-102	0	64	0	0	64	1,936	111	2,047	2,111
V-WA-AW-102	0	0	0	0	0	19	16	<i>35</i>	35
V-WA-W-101	0	1,120	231	953	2,304	7,557	4,352	11,909	14,213
T-MH-W55	0	314	14	222	550	4,383	883	5,266	5,816
T-MH-AW-55	0	0	0	0	0	11	0	11	11
T-MH-W56	0	539	0	0	539	1,711	0	1,711	2,250
T-MH-W53 NORTH	0	0	17	0	17	7,124	0	7,124	7,141
T-MH-W50	0	2,400	1,116	148	3,664	2,551	3	2,554	6,218
T-MH-AW-73	0	0	0	0	0	1,398	0	1,398	1,398
T-MH-W45	0	3,859	4,602	0	8,461	10,342	0	10,342	18,803
T-MH-W41	0	242	0	0	242	5,576	0	5,576	5,818

Table 3: Summary of Impacts for Individual Class II Wetlands and/or Class II Wetland 50-ft. Buffer Areas

			Class II Wetland	Impacts ²		Class II W	etland Buffer	Impacts	
Wetland ID ¹	Wetland Fill (Sq. Ft)	Temporary Wetland Impacts (Sq. Ft)	Temporary Wetland Clearing Impacts (Sq. Ft)	Permanent Wetland Clearing Impacts (Sq. Ft)	TOTAL WETLAND IMPACTS (Sq. Ft)	Temporary Buffer Impacts (Sq. Ft)	Permanent Buffer Impact (Sq. Ft)	TOTAL BUFFER IMPACTS (Sq. Ft)	TOTAL IMPACTS of Class II Wetland <u>and</u> 50-ft Buffer
T-MH-W38	0	463	0	597	1,060	2,632	925	3,557	4,617
T-MH-W37	0	332	109	0	441	1,415	67	1,482	1,923
T-MH-W33	0	555	398	0	953	3,649	7	3,656	4,609
T-MH-W28	0	37	0	0	37	5,458	0	5,458	5,495
T-MH-AW-69	0	0	0	0	0	103	0	103	103
T-MH-AW-70	0	0	0	0	0	6,160	0	6,160	6,160
T-MH-AW-24- South	0	0	0	0	0	1,830	0	1,830	1,830
T-MH-W23	0	220	0	0	220	2,534	0	2,534	2,754
T-MH-AW-23	0	0	0	0	0	23	0	23	23
T-MH-W20	0	878	159	141	1,178	2,590	230	2,820	3,998
T-MH-AW-66	0	0	0	0	0	2,792	0	2,792	2,792
T-MH-W11	0	0	0	0	0	510	0	510	510
T-MH-W9	0	61	564	0	625	13,917	1,973	15,890	16,515
T-MH-AW-9	0	0	0	0	0	2	64	66	66
T-LU-W13	0	0	1,046	0	1,046	6,780	283	7,063	8,109
TOTAL IMPACTS (sq. ft.)	0	33,338	66,701	26,314	126,353	429,537	50,596	480,133	606,486
TOTAL IMPACTS (acres)	0.00	0.77	1.53	0.60	2.90	9.86	1.16	11.02	13.92

 $^{^{\}rm 1}$ Wetlands are listed in order from west to east along the project corridor.

² Wetland fill impacts are those resulting from direct, permanent placement of fill (none proposed); temporary impacts are those resulting from temporary disturbance of non-forested wetlands in the Permanent Project Corridor or Temporary Workspace; temporary clearing impacts are those resulting from the use of matting in forested and scrub-shrub wetlands in Temporary Workspaces, which will regenerate following construction; permanent clearing impacts are those resulting from permanent conversion of forested wetlands to herbaceous or scrub-shrub wetlands in the Permanent Project Corridor following restoration of temporary disturbance from construction.

8. Protected functions and values of Class II wetlands include the following: water storage for flood water and storm runoff (VWR § 5.1), surface and groundwater protection (VWR § 5.2), fish habitat (VWR § 5.3), wildlife and migratory bird habitat (VWR § 5.4), exemplary wetland natural community (VWR § 5.5), threatened and endangered species habitat (VWR § 5.6), education and research in natural science (VWR § 5.7), recreational value and economic benefits (VWR § 5.8), open space and aesthetics (VWR § 5.9), and erosion control through binding and stabilizing the soil (VWR § 5.10).

First, each Class II wetland complex was evaluated for the functions and values listed above to determine whether the functions and values were present and significant based on the consideration of detailed functional criteria. Secondly, this same process was applied to the subject wetlands (i.e. the area of wetland occurring within the project area).

Table 4, presented below, provides a summary of the significant function and values (1-10) that were found to be present for each wetland complex and each subject wetland. Functions and values not listed for a wetland area in Table 4 are either not present or are present at such a minimal level as to not be protected functions for the wetland at the time of evaluation and for this permit.

Table 4: Summary of the Protected Function and Values associated with each Class II Wetland Complex and Subject Wetland occurring within the TDI New England Project Area

Wetland ID ¹	Wetland Complex Functions and Values ²	Subject Wetland Functions and Values ²
V-BE-W-14	1, 2, 3, 4, 6, 10	1, 2, 3, 4
V-BE-W-100	1, 2, 10	1, 2, 10
V-WH-W-5	1, 2	1, 2
V-WH-W-6	1, 2, 5, 6	1, 2
V-WH-W-8	1, 2, 10	1, 2
V-WH-W-9	1, 2, 10	1, 2
V-WH-W-10	1, 2, 4, 10	1, 2
V-WH-W-11	1, 2, 4, 10	1, 2, 4
V-WH-W-4	1, 2	1, 2
V-FH-W-21	1, 2, 4, 10	1, 2, 4
V-FH-W-20	1, 2, 4, 10	1, 2, 4, 10
V-FH-W-19	1, 2, 4, 10	1, 2, 4
V-FH-AW-18	1, 2	1, 2
V-FH-W-15	1, 2, 3, 4, 6, 9, 10	1, 2, 4, 9, 10
V-FH-W-4	1, 2, 3, 4, 6, 10	1, 2, 4
V-FH-W-6	1, 2, 3, 4, 6, 10	1
V-FH-W-3	1, 2, 3	1, 2, 3
V-FH-W-5	1, 2	1, 2
V-FH-W-9	1, 2, 4, 6, 9	1, 2, 4, 9
V-CN-W-106	1, 2	1, 2
V-CN-W-102	1, 2, 3, 4, 6, 9, 10	1, 2, 10
V-CN-W-103	1, 2, 3, 4, 6, 9, 10	1, 2
V-CN-W-104	1, 2, 3, 4, 6, 9, 10	1, 2, 4, 6, 9
V-CN-W-113	1, 2, 10	1, 2
V-CN-W-115	1, 2	1, 2

Table 4: Summary of the Protected Function and Values associated with each Class II Wetland Complex and Subject Wetland occurring within the TDI New England Project Area

Wetland ID ¹	Wetland Complex	Subject Wetland	
	Functions and Values ²	Functions and Values ²	
V-CN-W-116	1, 2, 3, 4, 5, 6, 9, 10	1, 2	
V-CN-W-10	1, 2, 3, 4, 5, 6, 9, 10	1, 2, 4	
V-CN-W-11	1, 2, 4	1, 2	
V-CN-W-12	1, 2, 3, 4, 10	1, 2, 10	
V-CN-W-15	1, 2, 3, 4, 10	1, 2	
V-CN-W-16	None	None	
V-CN-W-17	1, 2, 3, 4, 9, 10	1, 2, 4, 9, 10	
V-CN-W-18	1, 2, 3, 4, 9, 10	1, 2, 4	
V-CN-W-3/6	1, 2	1, 2	
T-WR-AW-12	1, 2, 3, 4, 10	1, 2, 3, 4, 10	
T-RU-W4	1, 2, 4, 6, 9, 10	1, 2, 4, 9	
T-CL-W7	1, 2, 4	1, 2, 4	
T-CL-W6	2	2	
T-CL-W1	6	6	
T-CL-W15	1, 2, 4	2, 4	
T-CL-AW-15	1, 2, 4	2, 4	
T-CL-AW-25	1, 2, 4	1, 2, 4	
T-CL-AW-24	1, 2, 3, 4, 10	1, 2, 3, 4, 10	
T-CL-W17	1, 2, 3, 4, 10	2, 4	
T-CL-AW-18	1, 2, 3, 4, 10	2, 4	
T-CL-W18	1, 2, 3, 4, 10	2, 4	
T-CL-W20	4, 9	4, 9	
T-CL-W22	1, 2, 3, 4, 9, 10	2, 4, 9	
V-SH-W-7	1, 2, 4	2	
V-SH-W-201	2, 4, 10	2	
T-SH-AW8	1, 2, 10	1, 2, 10	
T-SH-W9	1, 2, 4	4	
T-SH-W10	2	2	
T-SH-W13	1, 2, 4	1, 2, 4	
T-WA-W3	2	2	
T-WA-W4	2, 10	2, 10	
T-WA-W9	2	2	
T-WA-W10	2	2	
V-WA-AW-106	1, 2, 4, 10	1, 2, 10	
V-WA-W-105	1, 2, 4	1, 2	
V-WA-AW-104	2	2	
V-WA-W-102	2	2	
V-WA-AW-102	2	2	
V-WA-W-101	1, 2, 4, 10	1, 2, 10	
T-MH-W55	1, 2, 4, 10	1, 2, 4	
T-MH-AW-55	1, 2, 4, 10	1, 2, 4	
T-MH-W56	1	1	
T-MH-W53	-	<u>*</u>	
NORTH	1, 2, 3, 4, 10	1, 2, 3, 4	
T-MH-W50	1, 2, 3, 4	1, 2, 3, 4	
T-MH-AW-73	1, 2	1, 2, 3, 4	
1 14111 1414A-12	⊥, ∠	⊥, ∠	

Table 4: Summary of the Protected Function and Values associated with each Class II Wetland Complex and Subject Wetland occurring within the TDI New England Project Area

Wetland Com	Wetland Complex and Subject Wetland Occurring Within the 1D1 New England Project Area				
Wetland ID ¹	Wetland Complex Functions and Values ²	Subject Wetland Functions and Values ²			
T-MH-W45	1, 4	1, 4			
T-MH-W41	1, 2, 4	1, 2			
T-MH-W38	1, 2, 3, 4, 6	1, 4, 6			
T-MH-W37	1, 2, 3, 4, 6	1, 2, 3, 4			
T-MH-W33	1, 2, 3, 4, 10	2, 4			
T-MH-W28	1, 2, 10	1, 2, 10			
T-MH-AW-69	1, 2, 3, 4, 6, 9, 10	1, 2, 3, 4, 9, 10			
T-MH-AW-70	1, 2, 3, 4, 6, 9, 10	1			
T-MH-AW-24- South	1, 2, 3, 4, 6, 9, 10	1, 6			
T-MH-W23	1, 2, 3, 4, 6, 9, 10	1, 2			
T-MH-AW-23	1, 2, 3, 4, 6, 9, 10	1, 2			
T-MH-W20	1, 6	1, 6			
T-MH-AW-66	1, 10	1, 10			
T-MH-W11	1	1			
T-MH-W9	1, 2, 4	1, 2, 4			
T-MH-AW-9	1, 2, 4	1, 2, 4			
T-LU-W13	1, 2, 3, 6	1, 3, 6			

¹ Wetlands are listed in order from west to east along the project corridor.

- 9. Table 5 presents a summary of each subject wetland and the functions and values that are present as demonstrated in the related sections within the permit applications as referenced below. In addition, Table 5 presents a statement of no undue adverse impact to these function and values based on the factors described in the related sections of the application, and as confirmed through a site visit and/or desktop review by Agency staff. The functions and values and the sections they are referenced in the application are as follows:
 - A. Water Storage for Flood Water and Storm Runoff. Section 16 of the permit application.
 - B. Surface and Groundwater Protection. Section 17 of the permit application.
 - C. **Fish Habitat.** Section 18 of the permit application.
 - D. Wildlife and Migratory Bird Habitat. Section 19 of the permit application.
 - E. Exemplary Wetland Natural Community. Section 20 of the permit application.
 - F. Rare, Threatened and Endangered Species. Section 21 of the permit application.
 - G. Education and Research in Natural Sciences. Section 22 of the permit application.
 - H. Recreational Value and Economic Benefits. Section 23 of the permit application.

² Alpha-numeric codes correspond to functions and values designated in the 2010 Vermont Wetland Rules (Section 5 Functional Criteria for Evaluating a Wetland's Significance) and are denoted using the Vermont Wetland Evaluation Form ID as follows: 1 - Water storage for flood water and storm runoff, 2 - Surface and ground water protection, 3 - Fish habitat, 4 - Wildlife habitat, 5 - Exemplary wetland natural community, 6 - Rare, threatened, and endangered species habitat, 7 - Education and research in natural sciences, 8 - Recreational value and economic benefit, 9 - Open space and aesthetics, 10 - Erosion control through binding and stabilizing the soil.

- I. **Open Space and Aesthetics.** Section 24 of the permit application.
- J. **Erosion Control.** Section 25 of the permit application.

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-BE-W-14	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Fish Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. The Project will implement bank restoration and stabilization measures to protect the wetlands' continued ability to provide fish habitat by reducing sedimentation and supporting woody species that shade streams. Any temporary changes in stream shading and water quality would be minimal. After wetlands are restored following construction they are expected to continue to provide pre-construction levels of fish habitat. Based on the factors described in Section 18.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-BE-W-100	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Erosion Control	Generally, the Project effects on the subject wetlands are localized to narrow areas alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. EPSC measures will protect wetland and stream bank vegetation that provides slope stability and will protect banks along all surface waters. Any temporary change in the ability of wetlands to provide erosion control during construction would be minimal and would be expected to return to pre-construction levels following post-construction restoration and temporary stabilization (seeding, mulching, and/or installation of rolled erosion control product), permanent stabilization (vegetation re-establishment) and installation of applicable permanent EPSC measures. Based on the factors described in Section 25.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-WH-W-5	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-WH-W-6	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-WH-W-8	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-WH-W-9	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-WH-W-10	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-WH-W-11	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-WH-W-4	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
		levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-FH-W-21	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-FH-W-20	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Erosion Control	Generally, the Project effects on the subject wetlands are localized to narrow areas alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. EPSC measures will protect wetland and stream bank vegetation that provides slope stability and will protect banks along all surface waters. Any temporary change in the ability of wetlands to provide erosion control during construction would be minimal and would be expected to return to pre-construction levels following post-construction restoration and temporary stabilization (seeding, mulching, and/or installation of rolled erosion control product), permanent stabilization (vegetation re-establishment) and installation of applicable permanent EPSC measures. Based on the factors described in Section 25.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-FH-W-19	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-FH-AW-18	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-FH-W-15	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Open Space and Aesthetics	Impacts are localized in narrow areas within alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. In addition, permanent clearing will not take place near these wetlands. After temporary wetland impacts and vegetation clearing have been restored to pre-construction conditions and the wetland vegetation re-establishes, pre-construction levels of this function are expected. Based on the factors described in Section 24.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Erosion Control	Generally, the Project effects on the subject wetlands are localized to narrow areas alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. EPSC measures will protect wetland and stream bank vegetation that provides slope stability and will protect banks along all surface waters. Any temporary change in the ability of wetlands to provide erosion control during construction would be minimal and would be expected to return to pre-construction levels following post-construction restoration and temporary stabilization (seeding, mulching, and/or installation of rolled erosion control product), permanent stabilization (vegetation re-establishment) and installation of applicable permanent EPSC measures. Based on the factors described in Section 25.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-FH-W-4	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
		fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-FH-W-6	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-FH-W-3	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Fish Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. The Project will implement bank restoration and stabilization measures to protect the wetlands' continued ability to provide fish habitat by reducing sedimentation and supporting woody species that shade streams. Any temporary changes in stream shading and water quality would be minimal. After wetlands are restored following construction they are expected to continue to provide pre-construction levels of fish habitat. Based on the factors described in Section 18.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-FH-W-5	Water Storage for Flood Water and Storm Runoff	Wetland V-FH-W-5 was assessed to have this functioned evaluated at a low/ minimal level and therefore, not a protected function. The State Wetland Ecologist disagrees with that assessment. This is a forested wetland that contained surface water and evidence of water stained leaves at the time of evaluation. This indicates that although small in size, it is located along a road and has the capacity to store water following a precipitation event. Therefore, the state has determined this function to be protected for this wetland. However, most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Wetland V-FH-W-5 was assessed to have this functioned evaluated at a low/ minimal level and therefore, not a protected function. The State Wetland Ecologist disagrees with that assessment. This is a forested wetland that contained surface water and evidence of water stained leaves at the time of evaluation. This indicates that although small in size, it has the capacity to store and filter water following a precipitation event, which is increased in importance due to the proximity of the road. Therefore, the state has determined this function to be protected for this wetland. However, most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in ar undue adverse impact to this function.
V-FH-W-9	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Open Space and Aesthetics	Impacts are localized in narrow areas within alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. In addition, permanent clearing will not take place near these wetlands. After temporary wetland impacts and vegetation clearing have been restored to pre-construction conditions and the

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
		wetland vegetation re-establishes, pre-construction levels of this function are expected. Based on the factors described in Section 24.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-CN-W-106	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-CN-W-102	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Erosion Control	Generally, the Project effects on the subject wetlands are localized to narrow areas alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. EPSC measures will protect wetland and stream bank vegetation that provides slope stability and will protect banks along all surface waters. Any temporary change in the ability of wetlands to provide erosion control during construction would be minimal and would be expected to return to pre-construction levels following post-construction restoration and temporary stabilization (seeding, mulching, and/or installation of rolled erosion control product), permanent stabilization (vegetation re-establishment) and installation of applicable permanent EPSC measures. Based on the factors described in Section 25.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-CN-W-103	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-CN-W-104	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
	Rare, Threatened and Endangered Species	Virginia Chain-fern (Woodwardia virginica), an S1-ranked and state-threatened species, is avoided via HDD. Limited temporary impacts and clearing in the wetland near the eastern HDD setup area will not affect this species or habitat. Based on the factors described in Section 21.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Open Space and Aesthetics	Impacts are localized in narrow areas within alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. In addition, permanent clearing will not take place near these wetlands. After temporary wetland impacts and vegetation clearing have been restored to pre-construction conditions and the wetland vegetation re-establishes, pre-construction levels of this function are expected. Based on the factors described in Section 24.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-CN-W-113	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-CN-W-115	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-CN-W-116	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-CN-W-10	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-CN-W-11	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-CN-W-12	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Erosion Control	Generally, the Project effects on the subject wetlands are localized to narrow areas alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. EPSC measures will protect wetland and stream bank vegetation that provides slope stability and will protect banks along all surface waters. Any temporary change in the ability of wetlands to provide erosion control during construction would be minimal and would be expected to return to pre-construction levels following post-construction restoration and temporary stabilization (seeding, mulching, and/or installation of rolled erosion control product), permanent stabilization (vegetation re-establishment) and installation of applicable permanent EPSC measures. Based on the factors described in Section 25.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-CN-W-15	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-CN-W-16	No Significant Function and Values	This wetland is mapped as a Class II wetland; however, no functions were found to rise to a level to warrant protection. The functions of Water Storage for Flood Water and Storm Runoff and Surface and Groundwater Protection were found to be present, but at such minimal levels as to not be protected functions. Although not protected, the project will not significantly impact the low level of Water Storage for Flood Water and Storm Runoff and Surface and Groundwater Protection functions because most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide these two functions. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to preexisting conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 and 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-CN-W-17	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
		construction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Open Space and Aesthetics	Impacts are localized in narrow areas within alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. In addition, permanent clearing will not take place near these wetlands. After temporary wetland impacts and vegetation clearing have been restored to pre-construction conditions and the wetland vegetation re-establishes, pre-construction levels of this function are expected. Based on the factors described in Section 24.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Erosion Control	Generally, the Project effects on the subject wetlands are localized to narrow areas alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. EPSC measures will protect wetland and stream bank vegetation that provides slope stability and will protect banks along all surface waters. Any temporary change in the ability of wetlands to provide erosion control during construction would be minimal and would be expected to return to pre-construction levels following post-construction restoration and temporary stabilization (seeding, mulching, and/or installation of rolled erosion control product), permanent stabilization (vegetation re-establishment) and installation of applicable permanent EPSC measures. Based on the factors described in Section 25.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-CN-W-18	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-CN-W-3/6	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-WR-AW-12	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
	Fish Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. The Project will implement bank restoration and stabilization measures to protect the wetlands' continued ability to provide fish habitat by reducing sedimentation and supporting woody species that shade streams. Any temporary changes in stream shading and water quality would be minimal. After wetlands are restored following construction they are expected to continue to provide pre-construction levels of fish habitat. Based on the factors described in Section 18.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Erosion Control	Generally, the Project effects on the subject wetlands are localized to narrow areas alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. EPSC measures will protect wetland and stream bank vegetation that provides slope stability and will protect banks along all surface waters. Any temporary change in the ability of wetlands to provide erosion control during construction would be minimal and would be expected to return to pre-construction levels following post-construction restoration and temporary stabilization (seeding, mulching, and/or installation of rolled erosion control product), permanent stabilization (vegetation re-establishment) and installation of applicable permanent EPSC measures. Based on the factors described in Section 25.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-RU-W4	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Open Space and Aesthetics	Impacts are localized in narrow areas within alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. In addition, permanent clearing will not take place near these wetlands. After temporary wetland impacts and vegetation clearing have been restored to pre-construction conditions and the wetland vegetation re-establishes, pre-construction levels of this function are expected. Based on the factors described in Section 24.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-CL-W7	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-CL-W6	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
		construction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-CL-W1	Rare, Threatened and Endangered Species	Two small populations of Whorled Mountain Mint (<i>Pycnanthemum verticillatum</i>), an S2S3-ranked uncommon to rare species, occur along the roadside within a maintained transmission corridor. This wetland and the associated RTE species will be avoided. Temporary impacts to the wetland buffer will not affect the RTE populations. Based on the factors described in Section 21.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-CL-W15	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-CL-AW-15	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-CL-AW-25	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-CL-AW-24	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Fish Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. The Project will implement bank restoration and stabilization measures to protect the wetlands' continued ability to provide fish habitat by reducing sedimentation and supporting woody species that shade streams. Any temporary changes in stream shading and water quality would

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
		be minimal. After wetlands are restored following construction they are expected to continue to provide pre-construction levels of fish habitat. Based on the factors described in Section 18.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Erosion Control	Generally, the Project effects on the subject wetlands are localized to narrow areas alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. EPSC measures will protect wetland and stream bank vegetation that provides slope stability and will protect banks along all surface waters. Any temporary change in the ability of wetlands to provide erosion control during construction would be minimal and would be expected to return to pre-construction levels following post-construction restoration and temporary stabilization (seeding, mulching, and/or installation of rolled erosion control product), permanent stabilization (vegetation re-establishment) and installation of applicable permanent EPSC measures. Based on the factors described in Section 25.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-CL-W17	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-CL-AW-18	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-CL-W18	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T.C.I. W.20	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-CL-W20	Open Space and Aesthetics	Impacts are localized in narrow areas within alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. In addition, permanent clearing will not take place near these wetlands. After temporary wetland impacts and vegetation clearing have been restored to pre-construction conditions and the wetland vegetation re-establishes, pre-construction levels of this function are expected. Based on the factors described in Section 24.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-CL-W22	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Open Space and Aesthetics	Impacts are localized in narrow areas within alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. In addition, permanent clearing will not take place near these wetlands. After temporary wetland impacts and vegetation clearing have been restored to pre-construction conditions and the wetland vegetation re-establishes, pre-construction levels of this function are expected. Based on the factors described in Section 24.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-SH-W-7	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-SH-W-201	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-SH-AW8	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Erosion Control	Generally, the Project effects on the subject wetlands are localized to narrow areas alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. EPSC measures will protect wetland and stream bank vegetation that provides slope stability and will protect banks along all surface waters. Any temporary change in the ability of wetlands to provide erosion control during construction would be minimal and would be expected to return to pre-construction levels following post-construction restoration and temporary stabilization (seeding, mulching, and/or installation of rolled erosion control product), permanent stabilization (vegetation re-establishment) and installation of applicable permanent EPSC measures. Based on the factors described in Section 25.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-SH-W9	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-SH-W10	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-SH-W13	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-WA-W3	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-WA-W4	Erosion Control	Generally, the Project effects on the subject wetlands are localized to narrow areas alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. EPSC measures will protect wetland and stream bank vegetation that provides slope stability and will protect banks along all surface waters. Any temporary change in the ability of wetlands to provide erosion control during construction would be minimal and would be expected to return to pre-construction levels following post-construction restoration and temporary stabilization (seeding, mulching, and/or installation of rolled erosion control product), permanent stabilization (vegetation re-establishment) and installation of applicable permanent EPSC measures. Based on the factors described in Section 25.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-WA-W9	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-WA-W10	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-WA-AW-106	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Erosion Control	Generally, the Project effects on the subject wetlands are localized to narrow areas alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. EPSC measures will protect wetland and stream bank vegetation that provides slope stability and will protect banks along all surface waters. Any temporary change in the ability of wetlands to provide erosion control during construction would be minimal and would be expected to return to pre-construction levels following post-construction restoration and temporary stabilization (seeding, mulching, and/or installation of rolled erosion control product), permanent stabilization (vegetation re-establishment) and installation of applicable permanent EPSC measures. Based on the factors described in Section 25.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-WA-W-105	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-WA-AW-104	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-WA-W-102	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-WA-AW-102	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
V-WA-W-101	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Erosion Control	Generally, the Project effects on the subject wetlands are localized to narrow areas alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. EPSC measures will protect wetland and stream bank vegetation that provides slope stability and will protect banks along all surface waters. Any

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
		temporary change in the ability of wetlands to provide erosion control during construction would be minimal and would be expected to return to pre-construction levels following post-construction restoration and temporary stabilization (seeding, mulching, and/or installation of rolled erosion control product), permanent stabilization (vegetation re-establishment) and installation of applicable permanent EPSC measures. Based on the factors described in Section 25.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-W55	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-AW-55	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-W56	Water Storage for Flood Water and Storm Runoff	Wetland T-MH-W56 was assessed to have this function evaluated at a low/ minimal level and therefore, not a protected function. The State Wetland Ecologist disagrees with that assessment. This is an emergent wetland with dense, persistent vegetation located along a road with drainage patterns conveying water to a small pond. This indicates that although small in size, it has the capacity to store water following a precipitation event allowing for evaporation and transpiration of storm/flood waters to take place. Therefore, the state has determined this function to be protected for this wetland. However, most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-W53 NORTH	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID 1	Significant Function and	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
Wetland ID	Values ²	
	Fish Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. The Project will implement bank restoration and stabilization measures to protect the wetlands' continued ability to provide fish habitat by reducing sedimentation and supporting woody species that shade streams. Any temporary changes in stream shading and water quality would be minimal. After wetlands are restored following construction they are expected to continue to provide pre-construction levels of fish habitat. Based on the factors described in Section 18.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-W50	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Fish Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. The Project will implement bank restoration and stabilization measures to protect the wetlands' continued ability to provide fish habitat by reducing sedimentation and supporting woody species that shade streams. Any temporary changes in stream shading and water quality would be minimal. After wetlands are restored following construction they are expected to continue to provide pre-construction levels of fish habitat. Based on the factors described in Section 18.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-AW-73	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-W45	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-W41	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-W38	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Rare, Threatened and Endangered Species	Smaller Forget-me-not (<i>Myosotis laxa</i>), an S2-ranked rare species, occurs in a roadside ditch and wetland lawn within the subject wetland. A portion of the population within the existing, cleared and maintained Route 103 ROW will be temporarily impacted during construction of the Project. Species-specific RTE protection measures are to mitigate any potential undue adverse effects to this species population. These include: • Complete construction and restoration work in the population areas during the dormancy period if practical. Alternatively, if work cannot be completed during the dormancy period, collect seeds during the end of the growing season prior to construction and store in a cool, dry location for re-seeding following construction; and • Segregate topsoil and place adjacent to the work areas. Clearly mark the segregated topsoil with signage. This will contain the plant's seed bank for future repropagation of the population following construction and restoration; and • Post-construction, replace topsoil and restore the work area in the population area. If seeds were collected, utilize for re-seeding within the restored population area. Based on the factors described in Section 21.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-W37	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Fish Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. The Project will implement bank restoration and stabilization measures to protect the wetlands' continued ability to provide fish habitat by reducing sedimentation and supporting woody species that shade streams. Any temporary changes in stream shading and water quality would be minimal. After wetlands are restored following construction they are expected to continue to provide pre-construction levels of fish habitat. Based on the factors described in Section 18.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-W33	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
T-MH-W28	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Erosion Control	Generally, the Project effects on the subject wetlands are localized to narrow areas alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. EPSC measures will protect wetland and stream bank vegetation that provides slope stability and will protect banks along all surface waters. Any temporary change in the ability of wetlands to provide erosion control during construction would be minimal and would be expected to return to pre-construction levels following post-construction restoration and temporary stabilization (seeding, mulching, and/or installation of rolled erosion control product), permanent stabilization (vegetation re-establishment) and installation of applicable permanent EPSC measures. Based on the factors described in Section 25.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Fish Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. The Project will implement bank restoration and stabilization measures to protect the wetlands' continued ability to provide fish habitat by reducing sedimentation and supporting woody species that shade streams. Any temporary changes in stream shading and water quality would be minimal. After wetlands are restored following construction they are expected to continue to provide pre-construction levels of fish habitat. Based on the factors described in Section 18.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-AW-69	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Open Space and Aesthetics	Impacts are localized in narrow areas within alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. In addition, permanent clearing will not take place near these wetlands. After temporary wetland impacts and vegetation clearing have been restored to pre-construction conditions and the wetland vegetation re-establishes, pre-construction levels of this function are expected. Based on the factors described in Section 24.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Erosion Control	Generally, the Project effects on the subject wetlands are localized to narrow areas alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. EPSC measures will protect wetland and stream bank vegetation that provides slope stability and will protect banks along all surface waters. Any temporary change in the ability of wetlands to provide erosion control during construction would be minimal and would be expected to return to pre-construction levels following post-construction restoration and temporary stabilization (seeding, mulching, and/or installation of rolled erosion control product), permanent stabilization (vegetation re-establishment) and installation of applicable permanent EPSC measures. Based on the factors described in Section 25.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-AW-70	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
T-MH-AW-24-	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
South	Rare, Threatened and Endangered Species	The Cape May Warbler (Setophaga tigrina), an S1B-ranked very rare breeding bird, has been documented in this area. No wetland impacts are proposed. Temporary buffer impacts will occur, but no tree clearing is proposed. Thus, impacts to this species' preferred nesting habitat in the wetland or buffer zone will not occur. Based on the factors described in Section 21.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-W23	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-AW-23	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-W20	Rare, Threatened and Endangered Species	Smaller Forget-me-not (<i>Myosotis laxa</i>), an S2-ranked rare plant, occurs within a wetland ditch adjacent to the roadside. This wetland and population will be impacted during construction, but the species-specific RTE protection measures will be implemented to mitigate any potential undue adverse effects to this population. These include: • Complete construction and restoration work in the population areas during the dormancy period, collect seeds during the end of the growing season prior to construction and store in a cool, dry location for re-seeding following construction; and • Segregate topsoil and place adjacent to the work areas. Clearly mark the segregated topsoil with signage. This will contain the plant's seed bank for future re-propagation of the population following construction and restore the work area in the population area. If seeds were collected, utilize for re-seeding within the restored population area. Based on the factors described in Section 21.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-AW-66	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
. WIII AVV-00	Erosion Control	Generally, the Project effects on the subject wetlands are localized to narrow areas alongside existing road and railroad ROWs, where the subject wetland contributes minimally to the overall wetland complex function. EPSC measures will protect wetland and stream bank vegetation that provides slope stability and will protect banks along all surface waters. Any temporary change in the ability of wetlands to provide erosion control during construction would be minimal and would be expected to return to pre-construction levels following post-construction restoration and temporary stabilization (seeding, mulching, and/or installation of rolled erosion control product), permanent stabilization (vegetation re-establishment) and

Table 5: Summary of the Protected Function and Values associated with each Class II Subject Wetland occurring within the TDI New England Project Area

Subject Wetland ID ¹	Significant Function and Values ²	Determination of No Undue Adverse Impact on the Function and Values of each Subject Wetland
		installation of applicable permanent EPSC measures. Based on the factors described in Section 25.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-W11	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-W9	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adversing impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-MH-AW-9	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Surface and Groundwater Protection	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. The Project will implement stringent erosion and sedimentation control measures. Best Management Practices shall be implemented during the operation phase of vegetation management. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide preconstruction levels of this function. Based on the factors described in Section 17.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adversing impact to this function.
	Wildlife and Migratory Bird Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. Temporary effects to the wildlife habitat function from temporary soil disturbance and/or temporary vegetative will be minimal based on the result of wildlife evaluations and the location of the proposed Project. Rolled Erosion Control Product which will be comprised of natural fiber/mesh material shall be used. Once herbaceous and woody vegetation re-establishes, it is expected that the wetlands will continue to provide pre-construction levels of the wildlife function. Based on the factors described in Section 19.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
T-LU-W13 1 Wetlands are liste	Water Storage for Flood Water and Storm Runoff	Most wetland encroachments occur at wetland edges, minimizing the overall impact to their capacity to provide this function. Following construction, areas of temporary impact and temporary clearing will be restored to pre-existing conditions. After the subject wetlands are restored following construction, they are expected to continue to provide pre-construction levels of this function. Based on the factors described in Section 16.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Fish Habitat	Generally, the Project effects on the subject wetlands are localized to narrow areas. The Project will implement bank restoration and stabilization measures to protect the wetlands' continued ability to provide fish habitat by reducing sedimentation and supporting woody species that shade streams. Any temporary changes in stream shading and water quality would be minimal. After wetlands are restored following construction they are expected to continue to provide pre-construction levels of fish habitat. Based on the factors described in Section 18.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.
	Rare, Threatened and Endangered Species	Two populations of Smaller Forget-me-not (<i>Myosotis laxa</i>), an S2-ranked rare species, occur in a roadside ditch and in a more natural area further from the road within the subject wetland However, the populations will not be affected, as they occur on the opposite side of the road from where the cable, Permanent Project Corridor, Temporary Workspaces and associated impacts and clearing areas are proposed. Based on the factors described in Section 21.2 of the application, as confirmed by Agency staff, the proposed project will not result in an undue adverse impact to this function.

² Subject wetland is the area of wetland delineated within the Project Area; Permanent Project Corridor and Temporary Workspaces

- 10. Under 10 V.S.A. § 913 and VWR § 9.5, the Secretary may authorize activities in a Class II wetland or in its buffer zone if the Secretary determines that it complies with the VWR and will have no undue adverse effect on the protected functions and values. Based on the permit application, the site visit(s) by Agency staff, and the foregoing findings and analysis, the Secretary has determined that the proposed project will have no undue adverse effects on the protected functions and values of the subject Class II wetlands.
- 11. Pursuant to VWR § 9.5(b), the permittee has demonstrated that the proposed activity in the subject wetland cannot practicably be located outside the wetland or on another site owned, controlled, or available to satisfy the basic project purpose. All practicable measures have been taken in this proposal to avoid adverse impacts on protected functions, as described in the application.

The project will be restricted to the 12-foot-wide Permanent Project Corridor. Since a large portion of the Permanent Project Corridor is located within actively maintained road and railroad ROWs, and HDD areas will not require vegetation management since they are buried sufficiently deep, wetland and buffer impacts associated with ongoing vegetation management for the project have been avoided as much as possible while meeting the project purpose. As permitted, the project avoids any permanent wetland fill. Where impacts could not be practicably avoided, the permittee must comply with construction best management practices and a vegetation management plan to minimize and restore project impacts to the resource.

To avoid temporary impacts to wetlands, construction mats will be placed over vegetation to avoid rutting or soil compaction from machinery and impacts from temporary soil stockpiling. After construction, construction mats will be removed and these areas will be allowed to regenerate to pre-existing conditions.

Temporary impacts in wetland areas will be further mitigated with the following measures, which are contained in the project application and plans:

- Topsoil will be segregated from all proposed areas of temporary disturbance and will
 be stockpiled on geotextile fabric or construction mats. Topsoil will be returned to
 wetlands so as to preserve wetland biota and support rapid revegetation with native
 species (in concert with application of a wetland seed mix).
- Where limited areas of temporary fill are proposed in wetlands, geotextile fabric will be installed to support removal and restoration following construction.
- Trenches will be backfilled in reverse order of how they were excavated and the upper layer of topsoil will match the approximate depth of the surrounding wetland.
- Temporary impact areas will be seeded with a wetland or upland seed mix and temporarily stabilized with a weed-free straw mulch or other VT DEC-approved practice, and wetlands will be allowed to regenerate to preconstruction conditions.
- Where permanent clearing is required in PFO wetlands in the Permanent Project Corridor, conversion to herbaceous or scrub-shrub communities will occur.

- To mitigate any potential effects on wetland hydrology during construction, a temporary trench breaker will be installed on either side of wetland crossings as necessary to inhibit migration of ground and surface water along the open trench.
- 12. No public comments were received during the public comment period.

ABS/LVPL